INTERNATIONAL SEARCH REPORT

International application No.

PCT/NO 2004/000177 A. CLASSIFICATION OF SUBJECT MATTER IPC7: F16L 53/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC7: F16L, F17D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-INTERNAL, WPI DATA, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Α US 6328583 B2 (NESS ET AL), 11 December 2001 1-4 (11.12.2001), abstract A US 6509557 B1 (BASS), 21 January 2003 (21.01.2003), 1-2 figure 11, abstract US 20030015519 A1 (STONE, JR), 23 January 2003 Α 3-4 (23.01.2003), figures 1-2, abstract US 6371693 B1 (KOPP ET AL), 16 April 2002 A 3-4 (16.04.2002), figure 1A, abstract Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand "A" document defining the general state of the art which is not considered to be of particular relevance the principle or theory underlying the invention earlier application or patent but published on or after the international filing date "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other step when the document is taken alone special reason (as specified) "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is document referring to an oral disclosure, use, exhibition or other combined with one or more other such documents, such combination being obvious to a person skilled in the art document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 26 October 2004 7 -10-*2*004 Name and mailing address of the ISA/ Authorized officer **Swedish Patent Office** Box 5055, S-102 42 STOCKHOLM Jenny Petersson / JA A

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Information on patent family members

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International application No.

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US	6328583	B2	11/12/2001	GB GB NO NO US	0029619 2357910 311277 996522 20010005646	Ā,B B A	00/00/0000 04/07/2001 05/11/2001 29/06/2001 28/06/2001
US	6509557	B1	21/01/2003	US US	6278095 6278096		21/08/2001 21/08/2001
US	20030015519	A1	23/01/2003	US	6707012	В	16/03/2004
us	6371693	B1	16/04/2002	NON	 E		